Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte THOMAS EDWARD

Appeal No. 2000-1029
Application No. 08/867,617

ON BRIEF

Before GARRIS, PAK, and PAWLIKOWSKI, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-7 which are all of the claims in the application.

The subject matter on appeal relates to a method of forming a bond between a rubber body and a surface of a body such as a vehicle mount bracket member which has been coated with an epoxy resin cured at least to an immobile film at room temperature. The method comprises pressing a chlorinated surface of the

rubber body against the epoxy resin-coated surface and heating the rubber body and the epoxy resin-coated surface to a bond-forming temperature and maintaining the pressure and temperature for a time sufficient to form the bond.

This appealed subject matter is adequately illustrated by independent claims 1 and 7 which reads as follows:

1. A method of forming a bond between a first bracket member and a resilient rubber body containing at least 40 weight percent of at least one of polyisoprene rubber or neoprene in a vehicle mount comprising a first bracket member, a second bracket member and said resilient rubber body sandwiched between said bracket members, said method comprising

forming on a surface of at least one of said bracket members
a coating of an epoxy resin cured at least to an immobile film at room temperature,

chlorinating a surface of said rubber body provided that said body does not inherently contain chlorine in the form of neoprene rubber,

pressing said chlorinated surface against said epoxy resin-coated surface, and

heating said rubber body and bracket to a bond-forming temperature and maintaining said pressure and temperature for a time sufficient to form said bond.

7. A method for forming a bond between a rubber body containing at least 40 percent by weight of polyisoprene rubber and
a surface of a body coated with an epoxy resin cured at least to an immobile film at room temperature, said method comprising

chlorinating a surface of said rubber body,

pressing said chlorinated surface against said epoxy resin coated surface,

and

heating said rubber body and said epoxy resin coated surface to a bond-forming temperature and maintaining said pressure and temperature for a time sufficient to form said bond.

The prior art set forth below is relied upon by the Examiner

as evidence of obviousness:

Tibenham	2,657,162	Oct. 27, 1953
Campbell	3,586,568	June 22, 1971
Huber et al. (Huber)	3,802,989	Apr. 9, 1974
Kei et al. (Kei)	4,889,578	Dec. 26, 1989

The admitted prior art described on pages 2 and 3 of the subject specification.

Claim 1 stands rejected under the 35 U.S.C. § 103 as being

unpatentable over Huber in view of the admitted prior art.

Claims 2-7 stand rejected under the 35 U.S.C. § 103 as

being

unpatentable over Campbell in view of the admitted prior art and

further in view of either Kei or Tibenham.

We refer to the brief and reply brief and to the answer for

a complete discussion of the opposing viewpoints expressed by

the Appellant and by the Examiner concerning the above noted rejections.

OPINION

These rejections cannot be sustained.

We agree with the Appellant that the combined teachings of Huber and the admitted prior art would not have suggested the method of appealed claim 1 including particularly the forming and pressing steps thereof. At best, Huber and the admitted prior art would have suggested pressing a neoprene rubber body (which inherently contains a chlorinated surface) against an uncured adhesive coating or layer between the rubber body and a metal surface (e.g., see the paragraph bridging columns 1 and 2 of Huber). In contrast, as correctly explained by the Appellant in the brief and especially the reply brief, appealed claim 1 requires "pressing said chlorinated surface [of the rubber body] against said epoxy resin-coated surface" wherein the coating of epoxy resin is cured as recited in the forming step of appealed claim 1.

It follows that we cannot sustain the Examiner's § 103 rejection of appealed claim 1 as being unpatentable over Huber in view of the admitted prior art.

As for the § 103 rejection of appealed claims 2-7, we do not share the Examiner's conclusion that it would have been

obvious to combine the applied prior art teachings in the manner proposed. For example, we perceive no suggestion or reasonable expectation for success regarding the Examiner's proposal to modify the method of Campbell to include the epoxy resin coating of the admitted prior art in combination with the chlorinated rubber teaching of Kei or Tibenham. In essence, therefore, the rejection of these claims contains the same deficiency as the rejection of claim 1. That is, the here applied prior art simply would not have suggested a method of effecting a bond by pressing a chlorinated surface of a rubber body against and epoxy resin coated surface wherein the coating of epoxy resin is cured rather than uncured as in the Campbell, Kei and Tibenham references.

In light of the foregoing, we also cannot sustain the Examiner's § 103 rejection of claim 2-7 as being unpatentable over
Campbell in view of the admitted prior art and further in view of either Kei or Tibenham.

The decision of the Examiner is reversed.

REVERSED

BRADLEY R. GARRIS Administrative Patent Judge	)	
CHUNG K. PAK Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
BEVERLY A. PAWLIKOWSKI Administrative Patent Judge	)	

BRG/jrg

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